IN THE CLAIMS:

Please replace the claim set with the following complete set of claims.

Claim 1 (Currently Amended) A device for electromanipulation of chemical species in vivo relative to a target tissue comprising:

a voltage controlled and current controlled electrical source;

a substantially planar nonconductive sheet ~~comformable~~ conformable to the three-dimensional topography of the surface of the target tissue; and

a plurality of electrode elements secured in spaced apart relation on the sheet, the electrode elements ~~adapted to be coupled to an~~ coupled to receive a voltage controlled and current controlled output from the electrical source and ~~wherein~~ the electrode elements ~~are~~ being spaced together in sufficient proximity to insure that a peak power of less than 1 kilowatt is needed for electromanipulation of the target tissue.

Claim 2 (Canceled)

Claim 3 (Currently Amended) The device of claim 1 ~~2~~ wherein the plurality of electrode elements are integral to the sheet.

Claim 4 (Currently Amended) The device of claim 1 ~~2~~wherein the plurality of electrode elements project from the sheet towards the target tissue.

Claim 5 (Previously Presented) The device of claim 1 wherein the electrode elements are independently addressable.

Claim 6 (Original) The device of claim 1 wherein the electrode elements are addressable as one or more sets.

Claim 7 (Previously Presented) The device of claim 1 wherein the sheet is conformable to facilitate contact between the electrodes and the target tissue.

Claim 8 (Previously Presented) The device of claim 1 wherein the sheet is substantially rigid with a geometric shape adapted to facilitate contact between the electrodes and the target tissue.

Claim 9 (Canceled)

Claim 10 (Original) The device of claim 1 further comprising one or more fluid reservoirs adapted to deliver chemical species to the target tissue.

Claim 11 (Original) The device of claim 1 wherein the electrical source is integrated within the array base.

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Previously Presented) The device of claim 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined schedule.

Claim 15 (Previously Presented) The device of claim 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined time.

Claim 16 (Previously Presented) The device of claim 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined metabolic condition.

Claim 17 (Original) The device of claim 1 further comprising at least one micro plunger adapted to deliver chemical species to the target tissue.

Claim 18 (Original) The device of claim 17 further comprising:

at least one porous electrode element capping the at least one micro plunger whereby chemical species held with the at least one micro plunger are released through the at least one porous electrode element to the target tissue.

Claim 19 (Previously Presented) The device of claim 1 further comprising:

at least one external reservoir adapted to hold chemical species; and

at least one conduit fluidly coupling the at least one reservoir to the sheet whereby the chemical species are delivered through the at least one conduit to the sheet for delivery to the target tissue.

Claim 20 (Previously Presented) The device of claim 1 further comprising a thin film of chemical species on the sheet whereby the chemical species are delivered to the target tissue when the sheet is coincident to the target tissue.

Claim 21 (Original) The device of claim 20 wherein the chemical species are retained within the thin film by absorption means.

Claim 22 (Original) The device of claim 21 wherein the chemical species are released from the thin film by application of an energy means.

Claim 23 (Currently Amended) A device for manipulation of chemical species in vivo relative to a target tissue comprising:

a voltage controlled and current controlled electrical source;

a substantially planar nonconductive sheet conformable ~~comformable~~ to the topography of the three-dimensional surface of the target tissue;

a plurality of electrode elements projecting from the sheet towards the target tissue, the electrode elements addressable individually, the plurality of electrodes ~~adapted to be~~ coupled to receive a voltage controlled and current controlled output from the ~~an~~ electrical source and wherein the plurality of electrode elements are spaced together in sufficient proximity to insure that an electrical power having a peak of less than 1 kilowatt is needed for electromanipulation of the target tissue;

a control means interposed between the electrical source and the plurality of electrode elements and in circuit communication therein, the control means adapted to establish the ~~an~~ electrical potential between at least two electrodes of the plurality of electrodes; and

a delivery means adapted to introduce chemical species to the target tissue.

Claim 24 (Currently Amended) A method for electromanipulation of chemical species in vivo relative to a target tissue comprising the steps of:

placing at least one substantially planar nonconductive sheet conformable ~~comformable~~ to the three-dimensional topography of the surface of the target tissue coincident to the target tissue, the at least one sheet containing a plurality of electrode elements;

establishing an electrical potential between at least two electrode elements in the plurality of electrode elements, the electrical potential having a set voltage level and set current level such that the electrical power delivered to the at least two electrodes is less than about 1kW;

providing a chemical species coincident to the target tissue; and

controlling the electrical potential whereby the chemical species are delivered to the target tissue.

Claim 25 (Previously Presented) The method of claim 24 wherein the electrical potential affects electromigration of the chemical species to the target tissue.

Claim 26 (Previously Presented) The method of claim 24 wherein the electrical potential affects electroporation of the target tissue.

Claim 27 (Previously Presented) The method of claim 24 wherein the electrical potential affects both electroporation of the target tissue and electromigration of the chemical species to the target tissue in substantially concurrent synchronization.

Claim 28 (Currently Amended) The method of claim 24, further comprising the steps of:

establishing a predetermined sequence of voltage controlled and current controlled electrical potentials for the plurality of electrode elements; and

executing the predetermined sequence.

Claim 29 (Withdrawn) A method for combining at least two distinct chemical species in vivo relative to a target tissue comprising the steps of:

placing at least one array base coincident to a target tissue, the at least one array base containing a plurality of electrode elements;

establishing a first chemical staging location;

establishing a second chemical staging location;

establishing a chemical reaction location;

introducing a first chemical species to the first chemical staging location;

introducing a second chemical species to the second chemical staging location;

establishing an electrical potential between at least two electrode elements in the plurality of electrode elements; and

controlling the electrical potential to migrate the first and second chemical species towards the chemical reaction location.

Claim 30 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on the first chemical species.

Claim 31 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on the second chemical species.

Claim 32 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on a combination of the first and second chemical species.

Claim 33 (Withdrawn) The method of claim 29 further comprising the step of electromigrating a combination of the first and second chemical species from the chemical reaction location to the target tissue.